

CERTIFICATE OF FACSIMILE TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being transmitted via facsimile to: 703-872-9316 (Official Facsimile Number for TC2800/After Final) addressed to: Commissioner of Patents, Washington, D.C. 20231, on

December 3, 2001 (date of facsimile transmission)

V.D. DURAISWAMY (Name of Applicant, Assignee or Registered Representative)

V.D. Duraiswamy (Signature) December 3, 2001 (Date of Signature)
Reg. No. 31,505

PATENT

Docket No. PD-980189

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:

Date: December 3, 2001

Ellen K. Wesel

Serial No. 09/159,817

Group Art Unit: 2683

Filed: September 23, 1998

Examiner: T. Gesesse

For: COMMUNICATIONS SYSTEM USING A SATELLITE-BASED NETWORK
WITH A PLURALITY OF SPOT BEAMS PROVIDING UBIQUITOUS
COVERAGE FROM TWO DIFFERENT SATELLITES

REPLY BRIEF

Honorable Commissioner for Patents
Washington, D.C. 20231

Sir:

The following reply brief is submitted in response to the Examiner's answer mailed on October 23, 2001. Appellant believes the Examiner has presented several new grounds of rejection each of which will be taken in turn.

In the Examiner's response section, page 6, the Examiner states, "Appellant claim is so broadly recites that the satellite system in general[sic]. Hence, Rouffet *et al* anticipate that Rouffet *et al* teach a geostationary repeater satellite telecommunications facility in particular a direct television broadcasting facility capable of covering a plurality of coverage areas, see

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col. 2 lines 12-17. *Rouffet et al* teach both satellites generate plurality of beams to cover the same land mass i.e., S1 generates beam F1 to cover T1 and S2 generates beam F'1 to cover land mass T1, as clearly show by fig. 1[sic]." Appellant has reviewed Col. 2, lines 12-17, and finds a teaching of only two coverage areas which may have two different types of television coverage broadcast by two different satellites thereto. Applicant believes the Examiner fails to appreciate the scope of the present invention. Claim 1 recites a first set of spot beams that partially cover the land mass and a second satellite that generates a second plurality of spot beams so that the first plurality of spot beams in combination with the second plurality of spot beams provide substantially ubiquitous coverage over the land mass. Each of the satellites shown in the *Rouffet* reference overlap each other. That is, by looking at Fig. 1 of *Rouffet*, beams F1 and F2 are projected to areas T1 and T2 on the earth. From the second satellite S2, beams F'1 and F'2 cover the exact same areas T1 and T2. Therefore, it cannot be said that a second plurality of spot beams in combination with the first plurality of spot beams provide substantially ubiquitous coverage over the land mass. In addition, the areas T1 and T2 are disparate which further emphasizes that substantially ubiquitous coverage cannot be provided by *Rouffet*.

The second new ground of rejection begins on page 7 of the Examiner's answer. On page 7 the Examiner states: "On page 5, third paragraph, appellant argued that *Rouffet* does not teach the beam portions are independently adjustable in response to a condition, such as rain and heavy traffic. The examiner disagrees. In fact, *Rouffet et al* teach if one of the satellites S1 or S2 fails, the other satellite S2 or S1 continues to beam to both of area T1 and T2 until the satellite is repaired or until a replacement satellite is launched, see col. 3 lines 48-51. A communication failure would be occur due to condition on the ground such as bad

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weather or traffic overload, therefore, the system adjusts its beam portions in response to failure of one of the satellites to cover the land mass."

Appellant directs the Board to Fig. 13 and page 26 of the present application. Fig. 13 and the description on page 26, beginning on line 1, describes what is meant by the beam portions. The generally round beam is divided into various segments. The various segments of the beam are labeled A-I. It is described that the satellite is capable of independently controlling the data rates of the various areas within the spot beam 100 in response to a condition such as rain.

Appellant has reviewed Col. 3, lines 48-51, and finds no teaching of segmented beams. While it is true that this section refers to the failure of one of the satellites, no teaching or suggestion is found in this passage for beam portions within the beams that are adjustable in response to a condition which corresponds to claims 7-10.

The last new ground of rejection begins on page 7 of the Examiner's answer. The Examiner states, "On page 7, first paragraph, appellant argued that *Diekelman* does not have beam segments may be individually reconfigurable. However, the examiner disagrees, *Diekelman* discloses a satellite beam moves from circle 73 to 72 in response to the user's demand as the result of the movement of CU 80 from CU 81 position, and the service area within the circle 72 is divided into segments see col. 5 lines 11-28 and fig. 6."


Appellant has also reviewed this passage in the *Diekelman* reference and finds no teaching of beam portions within a beam as described above. The "CU" refers to a "communication unit" and does not refer to beam portions. The *Diekelman* reference in this passage merely teaches that a satellite beam is allowed to move in response to an access request from the various communication units. Moving beams on the whole is known, as

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shown in *Diekelman*. However, appellant respectfully submits that no teaching or suggestion is provided in this passage for a beam portion or beam portions that are independently adjustable as recited in claims 7-10.

For the reasons set forth above and for the reasons set forth in the Appeal Brief, appellant respectfully requests the Board to reconsider the present application and allow each of the claims.

Respectfully submitted,


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Dated: December 3, 2001

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DUPLICATE

PATENT
Docket No. PD-980189

CUSTOMER NO.: 020991

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Date: December 3, 2001

ELLEN K. WESEL.

Serial No. 09/159,817

Group Art Unit: 2683

Filed: September 23, 1998

For: COMMUNICATIONS SYSTEM USING A

SATELLITE-BASED NETWORK WITH A PLURALITY OF

Examiner: T. Gesesse

SPOT BEAMS PROVIDING UBIQUITOUS COVERAGE FROM

TWO DIFFERENT SATELLITES

**REPLY BRIEF
TRANSMITTAL LETTER**Commissioner for Patents
Washington, D.C. 20231

Sir:

Enclosed is the Reply Brief, in triplicate, for the above-identified patent application.

_____ Applicant petitions for an extension of time for _____ months(s). If an additional extension of time is required, please consider this a petition therefor.

_____ An extension for _____ months(s) has already been secured; the fee paid therefor of _____ Fee \$ _____
is deducted from the total fee due for the total months of extension now requested. \$ _____
Extension fee due with this request \$ _____

☒ Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

_____ The Appeal Brief Fee was paid in a prior appeal in which there was no decision on the merits by the Board of Appeals.

_____ The Appeal Brief Fee of **\$320.00** is due.

☒ The total fee due is **\$0.00**. Please charge this amount to Deposit Account No. 50-0383 of Hughes Electronics Corporation, El Segundo, California. If any additional reply brief fee or extension fee is required, please charge it to Deposit Account No. 50-0383.

This letter is submitted in triplicate.

Respectfully submitted,

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CERTIFICATE OF FACSIMILE TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being transmitted via facsimile to 703-872-9315 (the Official Facsimile Number for TC 2600, After Final) addressed to Commissioner for Patents, Washington, DC 20231 on December 3, 2001.
(Date of Facsimile Transmission)

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December 3, 2001
Date of Signature